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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,183	08/18/2006	Lars Ingvarsson	HT-127	4031

7590 11/24/2009
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EXAMINER

SULLIVAN, DEBRA M

ART UNIT	PAPER NUMBER
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3725

MAIL DATE	DELIVERY MODE
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11/24/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,183	Applicant(s) INGVARSSON, LARS	
	Examiner DEBRA M. SULLIVAN	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 9-12 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 13-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 10, 2009 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-8 and 13-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification fails to provide support for the newly added limitation “and the edge cutters for cutting along a predetermined curved line”. Applicant cites figure 8 as providing support for the limitation and the amendment to the specification, however figure 8 does not provide adequate support for the amendment. Figure 8 simply shows curved lines in which the corners are formed from by the use of roll-forming units, however if the edge cutters where to cut along the designated curved lines the strip would be severed along the curved line and therefore the formation of the corners would not be possible. Furthermore, page 3 lines 23-

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24 states that the cutting of the edges may be carried out after the punching or before the punching and figures 1 and 2 further support this by showing the edge cutters positioned in advance of the roll-forming units. Therefore the specification supports the edge cutters cutting along the strip once prior to the forming of the first and second corners and does not support controlling the edge cutters for cutting along a predetermined curved line form forming the first and the second corner.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 and 13-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation “controlling the roll-forming units and the edge cutters for cutting along a predetermined curved line for forming a first corner...” and the limitation “controlling the roll-forming units and the edge cutters for cutting along a predetermined curved line to form a second corner...” renders the claim indefinite since it is unclear how the edge cutters are to cut along the predetermined curved line and still have the roll-forming unit form a first or a second corner. By cutting along a predetermined curved line the edge cutters would sever the strip along the curved line therefore preventing the roll-forming units from forming a corner as currently claimed. The examiner is interpreting the claim such that the edge cutters are controlled to cut along a predetermined curved line prior to the roll-forming units are controlled to form a first corner and afterward a second corner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3 are rejected, as best understood, under 35 U.S.C. 103(a) as being unpatentable over Ingvarsson et al (US Patent # 7,107,807) in view of Green et al (US Patent # 7,111,481). Ingvarsson et al discloses a method for forming, in a production line, profiles (See FIG 3) with a cross-section that varies along the length thereof, said profiles being formed from a plane metal strip (10) that is unwound from a coil (12), said method employing edge cutters (102, 103) and a plurality of roll-forming units (91-98), the edge cutter and the roll-forming units being individually displaceable sideways relative to the strip, the method comprising the steps of controlling the edge cutters for cutting along a predetermined curved line, controlling the roll-forming units for forming a first corner (27, 28) to each side of the center of the metal strip (10) in a first roll-forming section of the production line and controlling the roll-forming units to form a second corner (bottom corners of walls 25, 26) to each side of the center of the metal strip (10) between the first corners (27, 28) [See col. 2 lines 33-39, col. 5 lines 25-42, col. 5 line 47-col. 6 lines 7; FIGS 3, 11 & 12]. Ingvarsson et al discloses the invention substantially as claimed except for wherein the second corner is formed after the first corner has been formed. However, Green et al teaches of forming profiles in a plane metal strip by forming a first corner 208b and than forming a second corner (210b) after the first corner (208b) has been formed in order to prevent stress and buckling on the walls while deforming the edges [see col. 5 line 36-col. 6 lines

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8; FIG 3]. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Ingvarsson et al to have the second corner formed after the first corner as been formed, as taught by Green et al, in order to prevent stress and buckling on the walls while deforming the edges.

In reference to claim 2, Ingvarsson et al further discloses including the step of cutting a transverse slit in the strip (10) before forming the first and second corners, without fully severing the strip (10) and severing the strip with a terminal cutter (63, 64) after the first and second corners are formed to remove a trailing end from the length of the profile formed from the strip (10) [See col. 4 lines 50-65].

In reference to claim 3, Ingvarsson et al further discloses that the length of the profile formed have different widths of extend at opposed ends of the profile, the steps of method including adjusting the width of the strip between one slit that defines the trailing end of the length of the one profile, cutting a further slit to define a leading end of the length of a subsequent profile and there after cutting the strip (10) at both slits with the terminal cutter (63, 64) [See col. 4 lines 50-65].

2. Claims 4-8 and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ingvarsson et al in view of Green et al as applied to claim 1 above, and further in view of Schule (US 2004/0244453). Ingvarsson et al discloses the invention substantially as claimed except for wherein the method further comprises of thinning the profile. However, Schule teaches of a method for bending profiles by squeezing and stretching the material of a section in order to cause the material to bend and allowing the degree of bending to be adjusted quite accurately by varying the amount of force exerted [See paragraph 0009 and lines 11-18 of paragraph 0010].

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Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to improve the bending steps of Ingvarsson et al by allowing a force on the profile through the use of rollers to thereby thin the material and cause bending of the material, as taught by Schule, in order to obtain an accurate degree of bending.

Response to Arguments

Applicant's arguments filed September 10, 2009 have been fully considered but they are not persuasive. Applicant argues that Ingvarsson et al does not teach or suggest the roll-forming units and the edge cutters are controlled for cutting along a predetermined curved line for initially forming the first corners and controlling the roll-forming units and the edge cutters for cutting along a predetermined curved line to form the second corners.

The Examiner respectfully disagrees. As the claims currently stand the limitation which applicant is arguing is unclear and is not supported by the specification or drawing. However the examiner is interpreting the claim such that the edge cutters are controlled to cut along a predetermined curved line prior to the controlling of the roll-forming units to form a first corner and afterward a second corner. Ingvarsson et al does disclose that the edge cutters (102, 103) move in unison with the first pair for forming stations and the first pair for forming stations can be controlled to move along a predetermined curved line to produce curved edges [see col. 5 line 47-col. 6 line 7]. Therefore Ingvarsson et al in view of Green et al discloses the claimed invention and the rejection is deemed proper.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Debra Sullivan whose telephone number is (571) 272-1904. The examiner can normally be reached Monday - Thursday 10am - 8pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached at (571) 272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Debra M Sullivan/
Examiner, Art Unit 3725